



Roanoke County and the Town of Vinton

Water Source Overview

Major water sources include Carvins Cove Reservoir, Spring Hollow Reservoir, Crystal Spring, Falling Creek Reservoir, and groundwater wells. The Western Virginia Water Authority provides water service to the residents of Roanoke County and the City of Roanoke. Water use and projected demand data for the City of Roanoke is included in the community water system (CWS) totals found in the Roanoke County snapshot.

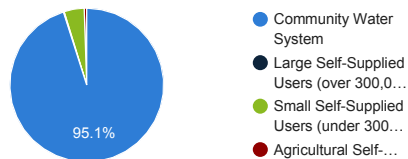
***Table 1:** Reported (2010) and projected (2040) water use by system type for Roanoke County in MGD

Type	Reported Use 2010 MGD	Projected Use 2040 MGD
Community Water System	24.754	27.055
Large Self-Supplied Users (over 300,000 gal/month)	0.052	0.086
Small Self-Supplied Users (under 300,000 gal/month)	1.092	1.807
Agricultural Self-Supplied Users	0.145	0.145

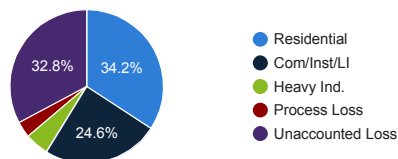
Water Use by System Type

Approximately 14,551 people use private groundwater wells for residential water supply. All tables and graphs represent reported water use including Sales to other localities, if applicable.

***Figure 1:** Percentage of reported water use by system type in 2010 (No use data shown on graph if less than .01 MGD: Refer to Table 1)



***Figure 2:** Disaggregated water use percentages for Community Water Systems in 2010 (No graph shown if no disaggregated use data reported)



***Table 2:** Reported (2010) and projected (2040) groundwater and surface water use for Roanoke County in MGD

Reported 2010 Groundwater Use (MGD)	Reported 2010 Surface Water Use (MGD)	Projected 2040 Groundwater Use (MGD)	Projected 2040 Surface Water Use (MGD)
12.04	14.00	13.89	15.21

***Figure 3:** Roanoke County highlighted in the Commonwealth of Virginia



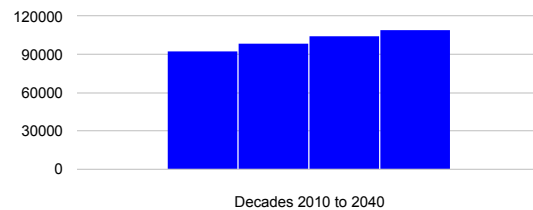
Projected Water Demand

Population and demand are projected to increase through the planning period. Existing water sources are expected to meet projected demands.

***Table 3:** Roanoke County population projections by decade from 2010 to 2040 (data gathered from VEC projections - 05/20/13)

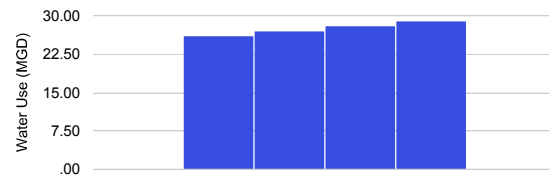
2010	2020	2030	2040	% Change (2010-2040)
92,376	98,413	104,063	109,373	18.5%

***Figure 4:** Roanoke County population projections by decade for 2010, 2020, 2030 & 2040



***Table 4 & Figure 5:** Roanoke County water demand trends by decade for 2010, 2020, 2030 & 2040 in MGD

Reported Use 2010 MGD	Projected Use 2020 MGD	Projected Use 2030 MGD	Projected Use 2040 MGD	Percent Change (2010-2040)
26.04	27.06	28.08	29.09	11.7%



Drought Management Practices

The County's drought enforcement measures shall be implemented and enforced by the Western Virginia Water Authority, per authorizing resolution. (Roanoke Valley Alleghany Regional Commission Regional WSP)